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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,722	07/31/2001	Kyoung Sup Shin	P-0247	1247

34610 7590 08/11/2005

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EXAMINER

QUIETT, CARRAMAH J

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/917,722		SHIN, KYOUNG SUP	
	Examiner		Art Unit	
	Carramah J. Quiett		2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2001 and 28 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment(s), filed on 3/28/2005, have been entered and made of record. Claims 1-20 are pending.

Drawings

2. The drawings were received on 3/28/2005. These drawings are acceptable.

Response to Arguments

3. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

In response to Applicant's comments regarding the Examiner's Office Action, mailed on 12/28/2004, the Examiner respectfully disagrees. The Applicant asserts that there is no suggestion in Kuchta for transmitting and displaying, during a telephonic communication, a sub-image signal instead of the main image signal in case the cut-off mode is set as recited in independent claim 1. Particularly, the Applicant argues that Kuchta does not relate to a cut-off mode and does not relate to telephonic communication. Similarly explained in each independent claim (1, 7, 10, and 13), Kuchta's cut-off mode is the operator-designated selection routine (fig. 3, ref. 112) can be set to display the low resolution image signal on the monitor (ref. 116) via the selector (ref. 104) and the D/A converter (ref. 114). When the selector (ref. 104) receives the selection routine, this selection allows the selector to determine whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

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As for the “telephonic communication,” this limitation did not appear in the claims at the time of the previous Office Action from the Examiner. The Examiner has provided an extra reference to overcome the amendments in this Office Action. Claims 1-15 as well as the newly added claims 16-20 are now rejected under 35 U.S.C 103(a) – Kuchta in view of Szajewski. Please see below.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuchta et al. (U.S. #5,164,831) in view of Szajewski et al. (U.S. #6,801,719).

As for **claim 1**, Kuchta teaches an image signal transmitting/receiving method, in figure 3A, comprising the steps of:

- transmitting/receiving a main image signal; the memory card (ref. 24), which stores image signals from figures 1A and 1B, transmits a high resolution (main) image signal to the connector (ref. 100), which receives a high resolution (main) image signal. Please read col. 7, lines 4-10 and col. 4, lines 53-67.
- checking whether a cut-off mode has been set for the main image signal; as explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) is considered a cut-

off mode. When the selector (ref. 104) receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

- transmitting and displaying a sub-image signal instead of the main image signal in case that the cut-off mode is set. As explained in col. 7, lines 4-58, after the memory card (ref. 24) transmits the image signals to the connector (ref. 100) and then to the file decoder (ref. 102), the low resolution (sub-) image signal is sent to the selector (ref. 104). The operator-designated selection routine (ref. 112), which is considered the cut-off mode, can be set to display the low resolution image signal on the monitor (ref. 116) via the selector (ref. 104) and the D/A converter (ref. 114).

However, Kuchta does not expressly teach a method for transmitting and displaying during telephonic communication. In the same field of endeavor, Szajewski teaches a method for transmitting and displaying, during telephonic communication (fig. 1, ref. 46), a sub-image signal (col. 10, lines 6-52). In light of the teaching of Szajewski, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Kuchta with a means for transmitting and displaying, during telephonic communication in order to evaluate images for composing the image (col. 11, lines 8-21).

For **claim 2**, Kuchta further teaches a method, in figure 3A, wherein the main image signal is a signal to be transmitted or a received image signal. The memory card (ref. 24), which stores image signals from figures 1A and 1B, transmits a high resolution (main) image signal to the connector (ref. 100), which receives a high resolution (main) image signal. Please read col. 7, lines 4-10 and col. 4, lines 53-67.

For **claim 3**, Kuchta further teaches a method, in figures 2A and 2B, wherein the sub-image signal is a signal stored in a predetermined storing area. In col. 4, lines 53-67, it states that the thumbnail (sub-) image signals are stored in a multi-format image file of the memory card (ref. 24) with an area for thumbnail and the same for the full resolution image.

For **claim 4**, Kuchta further teaches a method, wherein the sub-image signal is a signal inputted by a user. As illustrated in figure 1A, Kuchta states that a user can input a request (signal) to the processor (ref. 20), which sends a signal to the digital signal processor (ref. 22) to display the thumbnail (sub-) image signal (col. 4, lines 54-67). Moreover, in figure 3A, Kuchta further illustrates an operator-designated selection routine (ref. 112) where a user can input or request a thumbnail (sub-) image signal to be displayed (col. 7, lines 4-33).

For **claim 5**, Kuchta further teaches a method, wherein the sub-image signal is a previously transmitted main image signal. In figure 1A, when the image signal enters the compression and recording section (ref. 4) from the input section (ref. 2), the image signal is in full (high) resolution (col. 1, line 29 – col. 2, line 67). As the image signal enters the digital signal processor, Kuchta further explains the processing in figure 1B. The sub-image signal is a previously transmitted main image signal because the image signal does not separate into a low and high resolution until the signal undergoes discrete cosine transform (ref. 33). Please read col. 5, lines 7-35.

For **claim 6**, Kuchta further teaches a method, wherein the main image signal is transmitted and displayed in case that the cut-off mode has not been set. As explained in col. 7, lines 4-58, after the memory card (ref. 24) transmits the image signals to the connector (ref. 100) and then to the file decoder (ref. 102), the high resolution (main) image signal is sent to the selector (ref.

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104) via the expander (ref. 106) and the image buffer (ref. 108). The operator-designated selection routine (ref. 112), which is considered the cut-off mode, is capable of not being set to display the low resolution image signal on the monitor (ref. 116) via the selector (ref. 104) and the D/A converter (ref. 114)...the high resolution will be displayed.

Regarding **claim 7**, Kuchta discloses an image signal transmitting/receiving apparatus, in figures 1A and 3A, comprising:

- an image signal processor (fig. 1, ref. 22) for processing a main image signal (col. 3, line 22- col. 4, line 12);
- a display unit (fig. 3A, ref. 116) for displaying the received main image signal (col. 7, lines 30-33);
- a controller (ref. 112) for checking whether a cut-off mode has been set for the main image signal. As explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) is considered a cut-off mode. When the selector (ref. 104) receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).
- an image signal selector (ref. 104) for selectively outputting a sub-image signal instead of the main image signal to the image signal processor or the display unit in case that the cut-off mode has been set. As explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) is considered a cut-off mode. When the selector (ref. 104)

receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

However, Kuchta does not expressly teach an image signal selector for outputting during a telephonic communication. In the same field of endeavor, Szajewski teaches outputting, during a telephonic communication (fig. 1, ref. 46), a sub-image signal. In light of the teaching of Szajewski, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the image signal selector of Kuchta for outputting during a telephonic communication in order to evaluate images for composing the image (col. 11, lines 8-21).

For **claim 8**, Kuchta further discloses an apparatus, wherein the sub-image signal is a signal stored by a user or the main image signal that has been previously transmitted. As illustrated in figure 1A, Kuchta states that a user can input a request (signal) to the processor (ref. 20), which sends a signal to the digital signal processor (ref. 22) to display the thumbnail (sub-) image signal (col. 4, lines 54-67). Moreover, in figure 3A, Kuchta further illustrates an operator-designated selection routine (ref. 112) where a user can input or request a thumbnail (sub-) image signal to be displayed (col. 7, lines 4-33). In figure 1A, when the image signal enters the compression and recording section (ref. 4) from the input section (ref. 2), the image signal is in full (high) resolution (col. 1, line 29 – col. 2, line 67). As the image signal enters the digital signal processor, Kuchta further explains the processing in figure 1B. The sub-image signal is a previously transmitted main image signal because the image signal does not separate into a low and high resolution until the signal undergoes discrete cosine transform (ref. 33). Please read col. 5, lines 7-35.

For **claim 9**, Kuchta further discloses an apparatus, wherein the image signal selector outputs the main image signal to the image signal processor in case that the cut-off mode has not been set. As explained in col. 7, lines 4-58, after the memory card (ref. 24) transmits the image signals to the connector (ref. 100) and then to the file decoder (ref. 102), the high resolution (main) image signal is sent to the selector (ref. 104) via the expander (ref. 106) and the image buffer (ref. 108). The operator-designated selection routine (ref. 112), which is considered the cut-off mode, is capable of not being set to display the low resolution image signal on the monitor (ref. 116) via the selector (ref. 104) and the D/A converter (ref. 114)...the high resolution will be displayed.

For **claim 10**, Kuchta further discloses an image signal transmitting apparatus, in figures 1A and 3A, comprising:

- an image signal processor (fig.1, ref. 22) for processing a main image signal (col. 3, line 22-col. 4, line12);
- a controller (ref. 112) for checking whether a cut-off mode has been set for the main image signal. As explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) is considered a cut-off mode. When the selector (ref. 104) receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).
- an image signal selector (ref. 104) for outputting a sub-image signal instead of the main image signal to the image signal processor in case that the cut-off mode has been set. As explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected

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via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) is considered a cut-off mode. When the selector (ref. 104) receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

For **claim 11**, the limitations can be found in claim 8. Therefore, please read the reasons for rejecting claim 8 for the rejection of this claim.

For **claim 12**, Kuchta further discloses an apparatus, wherein the image signal selector outputs the main image signal to the image signal processor in case that the cut-off mode has not been set. As explained in col. 7, lines 4-58, after the memory card (ref. 24) transmits the image signals to the connector (ref. 100) and then to the file decoder (ref. 102), the high resolution (main) image signal is sent to the selector (ref. 104) via the expander (ref. 106) and the image buffer (ref. 108). The operator-designated selection routine (ref. 112), which is considered the cut-off mode, is capable of not being set to display the low resolution image signal on the monitor (ref. 116) via the selector (ref. 104) and the D/A converter (ref. 114)...the high resolution will be displayed.

As for **claim 13**, Kuchta discloses an apparatus, an image signal receiving apparatus, in figures 1A and 3A, comprising:

- an image signal processor (fig. 1, ref. 22) for processing a main image signal (col. 3, line 22-col. 4, line 12);
- a display unit (fig. 3A, ref. 116) for displaying the received main image signal (col. 7, lines 30-33);

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- a controller (ref. 112) for checking whether a cut-off mode has been set for the main image signal. As explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) is considered a cut-off mode. When the selector (ref. 104) receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).
- an image signal selector (ref. 104) for outputting a sub-image signal instead of the received main image signal to the display unit in case that the cut-off mode has been set. As explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) is considered a cut-off mode. When the selector (ref. 104) receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

However, Kuchta does not expressly teach an image signal selector for outputting during a telephonic communication. In the same field of endeavor, Szajewski teaches outputting, during a telephonic communication (fig. 1, ref. 46), a sub-image signal. In light of the teaching of Szajewski, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the image signal selector of Kuchta for outputting during a telephonic communication in order to evaluate images for composing the image (col. 11, lines 8-21).

For **claim 14**, the limitations can be found in claim 8. Therefore, please read the reasons for rejecting claim 8 for the rejection of this claim.

For **claim 15**, Kuchta further discloses an apparatus, wherein the image signal selector outputs the received main image signal to the image signal display unit in case that the cut-off mode has not been set. As explained in col. 7, lines 4-58, after the memory card (ref. 24) transmits the image signals to the connector (ref. 100) and then to the file decoder (ref. 102), the high resolution (main) image signal is sent to the selector (ref. 104) via the expander (ref. 106) and the image buffer (ref. 108). The operator-designated selection routine (ref. 112), which is considered the cut-off mode, is capable of not being set to display the low resolution image signal on the monitor (ref. 116) via the selector (ref. 104) and the D/A converter (ref. 114)...the high resolution will be displayed.

For **claim 16**, Kuchta, as modified by Szajewski, discloses a method further comprising setting the cut-off mode; as explained in Kuchta, col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) sets the cut-off mode. When the selector (ref. 104) receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

For **claim 17**, Kuchta, as modified by Szajewski, discloses a method wherein the cut-off mode is set (Kuchta, col. 7, lines 4-58). However, Kuchta and Szajewski do not expressly disclose a method wherein the cut-off mode is set during telephonic communication. The Examiner takes Official Notice that it is well known in the art to set the cut-off mode during telephonic communication. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a method for setting the cut-off mode during telephonic communication in the imaging devices of Kuchta as well as Szajewski so that a user

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can not only communicate in an ordinary manner, but also may view a displayed image. This modification would also provide the compressed transmitted images with a constant data rate.

For **claim 18**, Kuchta, as modified by Szajewski, discloses a method further comprising a device for setting the cut-off mode; as explained in Kuchta, col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) sets the cut-off mode. When the selector (ref. 104) receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

Regarding **claims 19-20**, these claims are apparatus claims corresponding to the method claims 17-18, respectively. Therefore, claims 19-20 are analyzed and rejected as previously discussed with respect to claims 17-18, respectively.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Tanaka et al. (#6,919,923)

A digital still camera with a means responsive to the receiving means for reducing the number of pixels of the still image, and means for transmitting the signal containing the image signal to the designated device.

Kuzma (#5,389,965)

Video frames presented to the compressor at a rate, which is varied in order to maintain constant rate data signal at the compressor's output.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carramah J. Quiett whose telephone number is (571) 272-7316. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.J.Q.
August 1, 2005



NGOC-YEN VU
PRIMARY EXAMINER